



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
ENVIRONMENTAL ASSESSMENT

February 10, 2014

Larry Hartig, Commissioner
Alaska Department of Environmental Conservation
410 Willoughby Avenue, Suite 303
P.O. Box 111800
Juneau, Alaska 99811-1800

Re: Response to the request for adjudicatory hearing by Flint Hills Resources Alaska

Dear Mr. Hartig:

I submit this response to the above-named request for adjudicatory hearing in my capacity as a toxicologist with the U.S. Environmental Protection Agency's (EPA) Office of Environmental Assessment in Region 10, based in Seattle.

Upon learning of and reviewing the "Notice of Request for Adjudicatory Hearing on ADEC's Conditional Approval of the Revised Human Health Risk Assessment, Flint Hills North Pole Refinery" (Request for Hearing), I shared this information with Dan Petersen, Ph.D. Dr. Petersen is a chemical manager with EPA's Office of Research and Development (ORD) and was the principal author of the Provisional Peer Reviewed Toxicity Value for Superfund (PPRTV) for sulfolane, the chemical of environmental concern at Flint Hills. The toxicological information presented in the PPRTV for sulfolane was used in the development of the groundwater cleanup level, as approved by ADEC for the Flint Hills Refinery site.

I particularly drew Dr. Petersen's attention to pages 25-26 in section 3 of the Request for Hearing, titled "The Cleanup Level Selected By DEC Is Not Supported By Best Current Science." In this section, the Requestor claims that EPA should have used a benchmark modeling approach using specific statistical techniques in order to derive the oral noncancer toxicity value for sulfolane, that is, the reference dose. The Requestor also takes issue with EPA's choice of an uncertainty factor to be applied in the derivation of the reference dose. The reference dose is frequently critical in the calculation of cleanup levels for contaminated environmental media, particularly when the chemical is not considered to be carcinogenic, which is the case for sulfolane at this time.

According to what Dr. Petersen related to me, the methodology ORD used for deriving a reference dose for sulfolane is the standard methodology used by ORD for this purpose. The development of PPRTVs complies with EPA methodologies and practices for the development of toxicity values, including reference doses. Dr. Petersen acknowledged that entities outside EPA as well as other programs within EPA may choose to follow alternative policies and practices and could thereby derive different reference doses for the same chemical.

Nevertheless, the claims by the Requestor regarding the appropriateness of EPA's derivation of the reference dose for sulfolane are incorrect.

Thank you for the opportunity to submit this comment.

Very truly yours,

Marcia L. Bailey, D.Env.
Toxicologist

cc: Gary Mendivil, Hearing Liaison, Office of the Commissioner, via e-mail and facsimile
Steve Bainbridge, Contaminated Sites Program Manager, ADEC, via e-mail